

## **REMARKS**

### **Claim Objections**

Claims 27-31 are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-10 of U.S. Patent No. 6,308,776. Since U.S. Patent No. 6,308,776 and the present application are commonly assigned to FSI International, Inc., upon the allowance of patentable subject matter, Applicants do agree to file a terminal disclaimer disclaiming the subject matter of the present claims beyond the term of the '776 patent.

Claims 27-31 are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-15 of U.S. Patent No. 5,706,890. This rejection is inappropriate based upon the fact that the document identified as U.S. Patent No. 5,706,890 is not really a patent because it issued erroneously. Upon reviewing the file wrapper for the '890 patent it is apparent that the '890 patent does not exist. On January 7, 1997 a Petition for withdrawal from issue for abandonment to permit consideration of an information disclosure statement in a continuing application was filed. On January 9, 1997 the Office of Patent Publication sent notice that the petition to withdraw the application was granted and the application was withdrawn from issue. The document further stated that, "The abandonment is hereby recognized." Applicants assert that although the document was printed, it is not in fact a valid patent since the file history establishes that the application was withdrawn and abandoned. To this end, U.S. Patent 5,706,890 does not exist and the double patenting rejection based upon this reference should be withdrawn. Applicants hereby request that the Examiner withdraw this double patenting rejection.

### **Claim rejections under 35 USC 102/103**

Claims 27, 29 and 30 are rejected under 35 USC 102(b) as anticipated by or, in the alternative, under 35 USC 103(a) as obvious over Ebinuma et al. (5,577,552). The Office Action states that it would have been obvious to more precisely control temperature at stations 7 and 8 by controlling each of heaters 16 and 17 in a separate

feedback loop such as shown in reference to heater 15 (controller 23, temperature sensor 22).

Applicants respectfully traverse the rejection(s).

Ebinuma discloses a temperature controlling device usable in a semiconductor exposure apparatus. This device has as its object "to provide a temperature control device by which, with a simple structure and at high precision, temperature control can be made to plural subjects of temperature control which are placed at different sites." See column 1, line 65 to column 2, line 2. The device as described therein is stated to be simple expressly to avoid the "*inconvenience of necessity of using plural high-precision feedback control devices.*" See Column 1, lines 61-64. Ebinuma, therefore, teaches away from independently monitoring the temperature at each individual workstation, as required in the present claims, since doing so would make the structure more complicated and would contradict their desire to keep the structure simple.

Specifically, at each disclosure of a sensor in Ebinuma, only one sensor is provided in the entire system. See, e.g. Fig 2, reference number 22 and Figs 3 and 4, reference number 26. The Ebinuma system operates on a different principle from the present invention, because it seeks to "provide a system for plural subjects of temperature control, which requires high-precision temperature control, by a combination of one precise constant-temperature liquid medium supplying device with a distributor and simple heat exchanging devices such as heaters, for example." Column 4, lines 47-53. Ebinuma therefore intentionally uses a single temperature control feedback loop to control the temperature at more than one site. Temperature control of the plural subjects in the Ebinuma system is accomplished by designing the structure with different pressures and heat exchanging portions, thereby resulting in substantially the same temperature being experienced by each subject without independent controlling of heating of the fluid provided to each individual station. See column 6, lines 50-57 of Ebinuma, as compared to the present claims.

It is respectfully submitted that the addition of individual workstation temperature control feedback loops to the structure of the Ebinum system would obviate the invention of Ebinuma and contradict their mode of operation. To this end, Applicants' invention is neither anticipated nor rendered obvious by Ebinuma, since

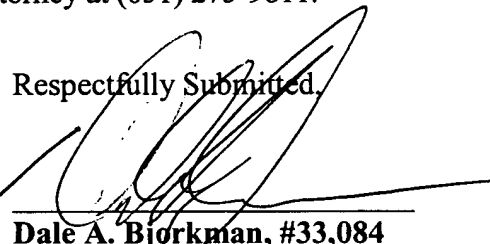
Ebinuma teaches away from adding a temperature control feedback loop on each heat exchanging portion. Applicants respectfully request the Examiner to withdraw the rejection(s) based upon Ebinuma.

Claims 28 and 31 have been rejected under 35 USC 103(a) as being unpatentable over the prior art as applied to claims 27 and 29 above, and further in view of JP 62-74112 or Moen or JP 4-371751 or JP 61-27444. The same arguments as stated above in response to the rejection based upon Ebinuma apply to claims 28 and 31. The disclosures of JP 62-74112 or Moen or JP 4-371751 or JP 61-27444 do not overcome the deficiencies of Ebinuma. One of ordinary skill would have no motivation to modify the Ebinuma reference in a manner contrary to the object of that reference. Applicants therefore respectfully request the Examiner to withdraw the rejections based upon these references.

It is respectfully submitted that the claims and the present application are now in condition for allowance. Approval of the application and allowance of the claims is earnestly solicited. In the event that a phone conference between the examiner and the Applicant's undersigned attorney would help resolve any remaining issues in the application, the Examiner is invited to contact said attorney at (651) 275-9811.

Respectfully Submitted,

By: ✓

  
**Dale A. Bjorkman, #33,084**  
Kagan Binder, PLLC  
Suite 200, Maple Island Building  
221 Main Street North  
Stillwater, MN 55082  
Phone: 651-275-9811  
Facsimile: 651-351-2954

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